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| 10/767,090      | 01/29/2004  | Etsunori Fujita      | 9035.1021           | 4604             |

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EXAMINER

BURNHAM, SARAH C

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

3636

DATE MAILED: 01/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/767,090

Applicant(s)

FUJITA ET AL.

Examiner

Sarah C. Burnham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 15-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/29/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>5/10/04</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Election/Restrictions***

1. Claims 15-17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on December 6, 2004.

***Priority***

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Information Disclosure Statement***

3. The information referred to in the information disclosure statements filed on May 10, 2004 has been considered as to the merits.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-14 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The following words/phrases lack sufficient antecedent basis:

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- the seat back (claim 1, line 2; claim 1, line 4; claim 2, line 8; claim 6, line 3; claim 7, line 2; claim 7, line 4; claim 18, line 2)
- the seat cushion (claim 1, line 5; claim 8, line 2; claim 8, lines 5-6; claim 9, line 3; claim 10, lines 1-2; claim 10, line 3; claim 10, line 6; claim 11, lines 1-2; claim 11, line 3; claim 11, line 6; claim 12, line 2; claim 12, line 4; claim 12, lines 4-5; claim 13, lines 1-2; claim 13, line 3; claim 13, line 4; claim 13, line 6; claim 14, line 2; claim 14, line 4; claim 1, lines 4-5 claim 18, line 2)
- the width direction (claim 2, lines 3-4; claim 4, lines 2-3)
- the rear (claim 2, line 6)
- the pelvis (claim 2, line 6-7)
- the bottom end (claim 2, line 9; claim 3, line 2)
- the waist portion (claim 6, line 2; claim 6, line 6)
- the upper frame (claim 7, lines 2-3)
- the end portion (claim 7, line 3)
- the back face side (claim 7, line 4)
- the front end portion (claim 8, line 3)
- the rear end portion (claim 8, line 5)
- the width direction (claim 10, lines 2-3)
- the back face (claim 10, line 3)
- the front portion (claim 11, line 4)
- the one side portion (claim 12, line 3; claim 14, line 3)

Claims 5 and 9 are rejected as being dependent upon a rejected base claim.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-4, 6, 8-9 and 18 are rejected as best understood with the above cited indefiniteness under 35 U.S.C. 103(a) as being unpatentable over Mori (US 2003/0085600) in view of Mitchell (5,697,672). With respect to claim 1, Mori discloses a seat structure (1) including a back frame (21) and a cushion frame (3) comprising a flat-type supporting member (7) for the seat back (2) supported by said back frame (21); a tensions adjusting mechanism (10) for adjusting a tension of said flat-type supporting member (7) for the seat back (2).

With respect to claim 2, said tensions adjusting mechanism (10) comprises a torsion bar (16) disposed in the vicinity of a bottom end of said back frame (21) along the width direction of the back frame (21) as is best depicted in Figure 1; and a pelvis support plate (52) composed of a plate member having a predetermined width and length, connectedly disposed with said torsion bar (16) as is best depicted in Figures 3-5, positioned in the rear of the pelvis of a seated person and enforced in a direction pushed forward in a normal state (see Figures 6 and 7), said flat-type supporting member (7) for the seat back (2) is engaged with the vicinity of a bottom end of said

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pelvis supporting plate (52) at the bottom end thereof, and strained vertically on said back frame (21) by an elastic force of said torsion bar (16).

With respect to claim 3, said torsion bar (16) is connected to the vicinity of the bottom end of said pelvis supporting plate (52) as is best seen in Figures 3, 4, and 5.

With respect to claim 4, said pelvis supporting plate (52) is formed in a curved shape protruding backward at nearly central portion thereof in the width direction as is best depicted in Figures 6 and 7.

Mori discloses all claimed elements with the exception of a flat-type supporting member for the seat cushion elastically supported by said cushion frame separately from said flat-type supporting member for the seat back; coil springs between respective side portions and respective side frames; coil springs engaging said flat-type supporting member for the seat cushion with a frame; and a flat-type supporting member for the seat cushion and the seat back composed of a two-dimensional net member.

Mitchell discloses a seat cushion arrangement in Figure 3 with a flat-type supporting member (3)(4) the seat cushion elastically supported by said cushion frame (23) separately from a flat-type supporting member (1) for the seat back disclosed in Figures 1 and 2. Furthermore, Mitchell discloses coil springs (5) disposed between respective side portions (2) of said flat-type supporting member (1) and a seat back frame (un-illustrated). Furthermore, Mitchell discloses coil springs (5) which engage the flat-type supporting member (3)(4) for the seat cushion ((Figure 3) with the seat cushion frame (23). Finally, Mitchell discloses a flat-type supporting member (1) for the seat back and a flat-type supporting member (3)(4) for the seat cushion that is made of a two

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dimensional net given the warp and weft style wires used to form the flat-type supporting members.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention of include a seat cushion frame with a flat-type supporting member and coil springs supporting the flat-type supporting member on the back frame and cushion frames. Such a modification provides a mechanism for varying the contour of the seat cushion support and the seat back support to improve the comfort of the seat occupant.

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mori (US 2003/0085600) in view of Mitchell (5,697,672) as applied to claim 1 above, and further in view of Yokota (5,044,693). As disclosed above, Mori, as modified, reveals all claimed elements with the exception of a pelvis support plate formed of synthetic resin, a three-dimensional net member, a two dimensional net member or rubber.

Yokota teaches the use of a pelvis support plate (4) supported on a torsion bar (11) and suspended by springs (7a)(7b) within a back frame. The support plate is made of "hard yet elastic synthetic resin (claim 3, line 39).

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use resin to make the pelvis support plate (52) disclosed by Mori as taught by Yokota. Resin is readily known in the art to be a durable and inexpensive material.

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9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mori (US 2003/0085600) in view of Mitchell (5,697,672) as applied to claim 1 above, and further in view of Kawasaki (US 2004/0130202). As disclosed above, Mori, as modified, reveals all claimed elements with the exception of a fabric spring connected to an upper end of said flat-type supporting member and hung over the upper frame portion of said seat back frame.

Kawasaki teaches the use of a fabric spring member (18) connected to a flat-type supporting member (8) and wrapped around a frame member (24) and fixed to the back of the flat type supporting member (8).

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use a fabric spring (18) as taught by Kawasaki to cover over the flat-type supporting member. Such a modification would create a soft and flexible support surface for the seat occupant.

10. Claims 10- 14 are rejected as best understood with the above cited indefiniteness under 35 U.S.C. 103(a) as being unpatentable over Mori (US 2003/0085600) in view of Mitchell (5,697,672) as applied to claim 8 above, and in further view of Panicci (2,964,099). Mori, as modified, discloses all claimed elements with the exception of a first band member and a second band member.

With respect to claim 10, Pancini teaches the use of a first band member (42) for the seat cushion (6) is provided in layers at nearly central portion from front to back along the width direction on the back face of said flat-type support member (40) for the



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seat cushion. And connected to the vicinity of one side portion (unlabeled) of the flat-type supporting member (40) for the seat cushion (6) at one end, and engaged with a side frame (14) corresponding to the other side portion of the flat-type supporting member (40) for the seat cushion (6) at the other end.

With respect to claim 11, a second band member (40) for the seat cushion (6) is provided in layers in the vicinity of one side portion (unlabeled) of said flat-type supporting member (42) for the seat cushion in the direction from front to back, and connected to the vicinity of the front portion of the flat-type supporting member (42) for the seat cushion (6) at least at one end and engaged with the rear frame (50) at the other end, so that a setting height of the flat-type supporting member (42) for the seat cushion (6) is maintained at a predetermined height.

With respect to claim 12, the setting height of one side portion of said flat type supporting member (42) is higher than that of one side frame (14) corresponding to the one side portion of the flat-type supporting member (42) for the seat cushion (6) given the woven over and under configuration of the band member (40).

### ***Allowable Subject Matter***

11. Claims 13 and 14 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

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12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Graves (4,880,271); Bohlin (3,258,259); Takata (6,644,752); Hoshihara (4,896,918); Nagasaka (4,940,284); Nagashima (5,423,593); Swamy et al. (5,884,977); Nakane et al. (6,499,803); Warrick (4,712,834); Ronnhult et al. (4,627,661); Yokota (5,044,693); Fourrey et al. (4,588,172); Hatsutta et al. (4,564,235); Gregory (4,295,681); Sakurada et al. (4,296,965); Arai (4,159,847) and Letournoux (GB 2 059 497 A).

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarah C. Burnham whose telephone number is 703-305-7315. The examiner can normally be reached on M-Th 7:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Cuomo can be reached on 703-308-0827. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
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Technology Center 3600

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SCB

January 3, 2005